



ZS6-D1 Screw Clamp Terminal Block

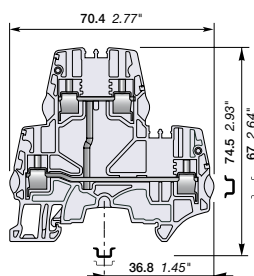
Double deck



6 mm²
10 AWG

6 mm 0.236 in Spacing




Features and Benefits



- Ease one potential distribution on 4 independent screw clamps,
- Save space by connecting conductors up to 6 mm² 10 AWG in just 6 mm 0.236 in spacing.

3D CAD outline drawings available on "Control Product 3D" portal

Ordering Details		Type	Order Code	EAN Code	Pack ^(ing)	Weight g (1 pce)
Grey	<input type="checkbox"/>	ZS6-D1	1SNK 506 211 R0000	3472595062119	50	18.41

Declarations and Certificates		Document Part Number
 CE	UE Directive	1SND 225 081 C1006
 CB	Third Party Certificate	1SND 161 026 A0200
RoHS 	RoHS	1SND 230 491 F0203
Atex Declaration	Atex Declaration	1SND 225 085 C1003





Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM 2	
II 2GD *	Ex e: increased security

* in the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D

General Information

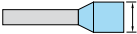
The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

Protection		IP 20	<i>NEMA 1</i>		
Rail		DIN3-TH35			
Wire stripping length		10 mm	<i>0.394 in</i>		
		Screw clamp		Screw rail contact (Maximum value)	
		Flat screwdriver			
Operating tool		4 mm	<i>0.157 in</i>		
Torque		0.85 Nm ± 0.15 Nm	<i>7.52 lb.in</i> <i>± 1.33 lb.in</i>	± 0.15 Nm	<i>± 1.33 lb.in</i>
Mechanical endurance of disconnect system					

Material Specifications

Insulating material		Polyamide
IRC		600 V
Flammability	UL94	V0
	NF F 16 101	I2F2
	Needle flame test IEC 60695-11-5	Compliant

Connecting capacity per clamp

1 Rigid conductor		0.2-6 mm²		<i>24-10 AWG</i>
1 Flexible conductor without ferrule		0.22-6 mm²		<i>24-10 AWG</i>
1 Flexible conductor with ferrule		0.22-4 mm²		<i>24-10 AWG</i>
Ferrule maximum outer diameter		5.5 mm	<i>0.216 in</i>	

Multi Connecting capacity per clamp

2 Rigid conductors		0.2-1.5 mm²		<i>24-16 AWG</i>
2 Flexible conductors without ferrule		0.22-1.5 mm²		<i>24-16 AWG</i>
2 Flexible conductors with twin ferrule		0.22-1.5 mm²		<i>24-16 AWG</i>

Don't mix **solid and flexible** conductors **in the same clamp**

Don't mix **solid or flexible** conductors of different sizes **in the same clamp**

The "Connecting capacity with ferrule " data is guaranteed with ABB crimping tool PS-3

Cross section

Rated cross section		6 mm²		<i>10 AWG</i>
Maximum Cross section	Manufacturer data	6 mm²	<i>Manufacturer data</i>	<i>10 AWG</i>
Gauge	A4-B3 / 3 mm / 0.118 in / IEC 60947-7-1			

Electrical characteristics

Current

Rated current		IEC 60947-7-1	40 A	
	Field and factory wiring Cat.2	UL 1059	30 A	
	Factory wiring Cat. 1	UL 1059	30 A	
		CSA-C-22.2 n° 158	30 A	
Rated short-time withstand current 1 s (I _{cw})			720 A	
Short-time withstand current	0.5 s	Manufacturer data		
	5 s	Manufacturer data		
	10 s	Manufacturer data		
	30 s	Manufacturer data		
	1 mn	Manufacturer data		
Rated short circuit withstand		CSA-C-22.2 n° 158		
Max. current (45° temperature increase) / Max. cross section (mm ²)		Manufacturer data	41 A	6 mm²
Maximum short circuit current (1s)		Manufacturer data	720 A	

Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR UL 1059

With the following configurations:

Maximum voltage

Suitable conductor wire range

Fuse rating

Fuse designation

Fuse manufacturer name

Fuse type

Short circuit current

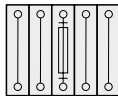
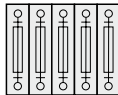
Voltage

Rated voltage	IEC 60947-1	800 V
Rated voltage	UL 1059	300 V
Use Group	UL 1059	C
Rated voltage	CSA-C-22.2 n° 158	300 V
Rated voltage Ex e	IEC/EN 60079-11	400 V
Rated impulse withstand voltage		8000 V
Dielectric test voltage		2000 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

Dissipated power

Maximum dissipated power at rated current	IEC	2.6 W
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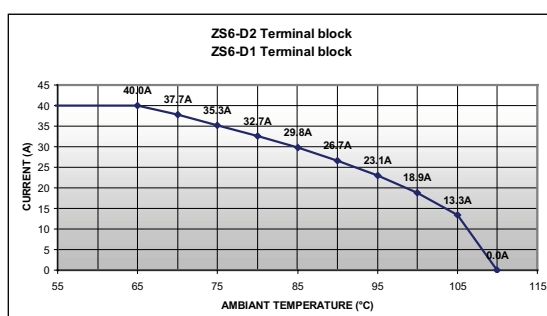
Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Overload and short-circuit protection Separate arrangement		
Exclusive short-circuit protection Separate arrangement	1 fuse and 4 feed-through blocks	
Overload and short-circuit protection Compound arrangement		
Exclusive short-circuit protection Compound arrangement	5 fuse blocks	

Temperature range

Ambient temperature min/max	Storage	-55 +110 °C	-67 +230 F
	Installing	-5 +40 °C	-23 +104 F
	Service	IEC 60068-2-1	-55 +110 °C
		EN 60079-7	-55 +85 °C

Current Derating curve for continuous service temperature



Environmental Characteristics

Additional climatic tests

Dry heat	Conditions	IEC 60068-2-2	Compliant	
		Temperature	+100 °C	
		Duration of test	96 h	
Cyclic damp heat	Conditions	IEC 60068-2-30	Compliant	
		Temperature	+55 °C	
		Number of cycles	2	
Cold	Conditions	IEC 60068-2-1	Compliant	
		Temperature	-40 °C	
		Duration of test	96 h	
Z/ABDM climatic sequence	Conditions	IEC 60068-2-61	Compliant	
		Dry heat Duration of test / Temperature	16 h	+85 °C
		Cyclic damp heat Number of cycles / Temperature	1	+55 °C
		Cold Duration of test / Temperature	2 h	-25 °C

Corrosion

Salt mist	Conditions	IEC 60068-2-11	Compliant	
		Duration of test	96 h	
		Concentration	5 %	
SO ₂	Conditions	ISO 6988	Compliant	
		Duration of test	48 h	
		Concentration	0.2 dm³	
Sulfur dioxide	Conditions	IEC 60068-2-42		
		Duration of test		
Hydrogen sulfur	Conditions	IEC 60068-2-43		
		Duration of test		
Flowing mixed gas corrosion test	Conditions	IEC 60068-2-60		
		Number of the test method		
		Duration of test		

Vibrations

Vibrations	Conditions	IEC 60068-2-6	Compliant	
		Frequency range	10-55 Hz	
		Number of cycles	10	
		Amplitude		
		Acceleration	10 m/s²	
Random vibrations and climatic sequence	Conditions	IEC 60068-2-64		
		Duration of test		
		Frequency range		
		Acceleration		
	Climatic cycles			
		Step 1 -> Temperature / Duration of test		
		Step 2 -> Temperature / Duration of test		
		Temperature variation per minute		

ZS6-D1 Terminal Block Accessories Compatibility

Description	Type	Order Code	Pack ^(ing) pieces	Weight g (1 pce)	Technical Datasheet PDF
1 End Stops	BAZH1	1SNK 900 102 R0000	20	23.90	1SNK 160 026 D0201
2 End Sections	ES4-D2	1SNK 505 960 R0000	20	4.10	1SNK 160 022 D0201
3 Jumper Bars	JB6-2	1SNK 906 302 R0000	50	1.30	1SNK 160 029 D0201
	JB6-3	1SNK 906 303 R0000	50	2.10	1SNK 160 029 D0201
	JB6-4	1SNK 906 304 R0000	50	2.90	1SNK 160 029 D0201
	JB6-5	1SNK 906 305 R0000	50	3.60	1SNK 160 029 D0201
	JB6-10	1SNK 906 310 R0000	20	7.40	1SNK 160 029 D0201
4 Test Adapters	TP2	1SNK 900 203 R0000	20	1.73	1SNK 160 036 D0201
	TP4	1SNK 900 205 R0000	20	2.42	1SNK 160 036 D0201
5 Test Connectors	TC5-R1	1SNK 900 201 R0000	10	5.23	1SNK 160 042 D0201
6 Spacers	ES-TC6	1SNK 900 105 R0000	10	0.80	1SNK 160 042 D0201
7 Shield Connectors	SHB	1SNK 900 602 R0000	20	4.90	1SNK 160 025 D0201
8 Tools	PS-3	1SNK 900 650 R0000	1	380.00	1SNK 160 024 D0201
9 Terminal Block Markers	MC612	1SNK 150 000 R0000	22	0.06	1SNK 160 006 D0201
	UMH	1SNK 900 611 R0000	10	0.20	1SNK 160 001 D0201
	PROCAP6	1SNK 900 612 R0000	20	0.79	1SNK 160 013 D0201
	SAT6	1SNK 900 615 R0000	5	6.00	1SNK 160 013 D0201